

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 57734 US (11259)
INTERNATIONAL APPLICATION NO. PCT/US03/21142	INTERNATIONAL FILING DATE 03 July 2003	U.S. APPLICATION NO. (if known) see 37 CFR 1.5 <b>10/520431</b> PRIORITY DATE CLAIMED 05 July 2002
TITLE OF INVENTION <b>TARGETING AND TRACKING OF CELLS TO SPECIFIC ORGANS AND TISSUES IN VIVO</b>		
APPLICANT(S) FOR DO/EO/US <b>LUM, et al.</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information:    Copy of Form PCT/IB/308; Application as Published under WO 2004/005531 A2; Copy of Application As-Filed; Copy of Response to Invitation to Correct Defects; Copy of PCT Chapter II Demand; Republished First Page and International Search Report; Copy of Form PCT/ISA/202; Copy of Form PCT/RO/105; Copy of Form PCT/IPEA/402; Copy of Form PCT/IB/304; Copy of Form PCT/IB/301; Copy of Form PCT/ISA/220; and Copy of PCT/ISA/210, International Search Report.		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. <b>10/520431</b> <small>U.S. PATENT AND TRADEMARK OFFICE (USPTO) 37 CFR 1.51</small>		INTERNATIONAL APPLICATION NO. <b>PCT/US03/21142</b>		ATTORNEY'S DOCKET NUMBER <b>57734 US (11259)</b>	
21. The following fees are submitted:					
<input checked="" type="checkbox"/> a) Basic national fee ..... \$300.00				\$	300.00
<input checked="" type="checkbox"/> b) Examination fee ..... \$200.00				\$	200.00
<input checked="" type="checkbox"/> c) Search fee ..... \$500.00				\$	500.00
<b>TOTAL OF ABOVE CALCULATIONS = \$1000.00</b>				\$	1,000.00
<input checked="" type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
81 (- 100)	0 /50 =	0	x \$250.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).				\$	130.00
<b>CLAIMS</b>	<b>NUMBER FILED</b>	<b>NUMBER EXTRA</b>	<b>RATE</b>		
Total claims	54 - 20 =	34	x 50.00	\$	1,700.00
Independent claims	4 - 3 =	1	x 200.00	\$	200.00
MULTIPLE DEPENDENT CLAIM(s) (if applicable)			+	\$	360.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	3,390.00
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	1,695.00
<b>SUBTOTAL =</b>				\$	1,695.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).				\$	130.00
<b>TOTAL NATIONAL FEE =</b>				\$	1,695.00
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	40.00
<b>TOTAL FEES ENCLOSED =</b>				\$	1,695.00
				Amount to be refunded:	\$
				Amount to be charged:	\$1,695.00
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.					
b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>04-1105</u> in the amount of \$ <u>1,695.00</u> to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>04-1105</u> . A duplicate copy of this sheet is enclosed.					
d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO: David G. Conlin EDWARDS & ANGELL, LLP P.O. Box 55874 Boston, Massachusetts 02205 (617) 439-4444 CUSTOMER NUMBER: 21874					
				SIGNATURE:	Marla L. Tocker
				NAME	54,493
				REGISTRATION NUMBER	

Application No. (if known): Not Yet Assigned


Attorney Docket No.: 57734 US (11259)

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV437822014US in an envelope addressed to:

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P.O. Box 1450  
Alexandria, VA 22313-1450

on January 5, 2005  
Date



Signature

Karen Brown

Typed or printed name of person signing Certificate

Registration Number, if applicable

(617) 439-4444

Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Fee Transmittal  
Application Data Sheet  
Preliminary Amendment  
Transmittal Letter to the United States Designated-Elected Office  
Copy of Form PCT/IB/308, Application as Published under  
WO 2004/005531 A2  
Copy of Application As-Filed  
Copy of Response to Invitation to Correct Defects  
Copy of PCT Chapter II Demand  
Copy of Republished First Page and International Search Report;  
Copy of Form PCT/ISA/202  
Copy of Form PCT/RO/105  
Copy of Form PCT/IPEA/402  
Copy of Form PCT/IB/304  
Copy of Form PCT/IB/301  
Copy of Form PCT/ISA/220  
Copy of PCT/ISA/210, International Search Report

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

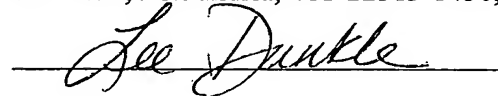
APPLICANT: Roger Williams Medical Center  
INT. APPLN. NO.: PCT/US03/21142  
FILED: 03 July 2003  
FOR: TARGETING AND TRACKING OF CELLS TO SPECIFIC  
ORGANS AND TISSUES IN VIVO

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450  
MAIL STOP PCT  
Attn: Sigfried Hostad

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Lee Dunkle

\*\*\*\*\*

Sir:

**RESPONSE TO INVITATION TO CORRECT DEFECTS  
IN THE INTERNATIONAL APPLICATION**

An Invitation to Correct Defects in the International Application was mailed on 14 August 2003, for the above-referenced international application.

Accordingly, in response to the Invitation to Correct Defects, enclosed please find the:

- 1) Copy of the Invitation;
- 2) Executed Signature Page (page 6 of the PCT Request Form); and
- 4) Formal Drawings (9 sheets).

10/520431

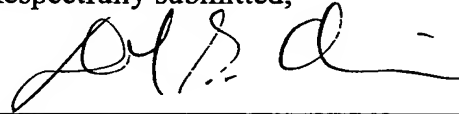
01 Rec'd PCT/PTO 05 JAN 2005

Response to Correct Defects  
PCT/US03/21142  
Page 2

Please charge any fees that may be due in connection with this matter to Deposit  
Account 04-1105.

Please contact the undersigned attorney if any additional information is needed.

Respectfully submitted,



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David G. Conlin (Reg. No. 27,026)  
Edwards & Angell, LLP  
P.O. Box 9169  
Boston, MA 02209  
(617) 439-4444

Sept 9, 2003  
DATE

BOS2\_347301.1

DT15 Rec'd PCT/PTO 05 JAN 2005

PTO/SB/17 (12-04)

Approved for use through 7/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<p>Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</p> <h2 style="text-align: center;">FEE TRANSMITTAL</h2> <h3 style="text-align: center;">For FY 2005</h3>		<p><b>Complete if Known</b></p> <p>Application Number: Not Yet Assigned <b>7520431</b></p> <p>Filing Date: Concurrently Herewith</p> <p>First Named Inventor: Lawrence G. Lum</p> <p>Examiner Name: Not Yet Assigned</p> <p>Art Unit: N/A</p> <p>Attorney Docket No.: 57734 US (11259)</p>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
<b>TOTAL AMOUNT OF PAYMENT</b> (\$) 1,695.00			

**METHOD OF PAYMENT** (check all that apply)

☐ Check  
 ☐ Credit Card  
 ☐ Money Order  
 ☐ None  
 ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account  
 Deposit Account Number: 04-1105  
 Deposit Account Name: Edwards & Angell, LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below  
 ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or any underpayment of fee(s) under 37 CFR 1.16 and 1.17  
 ☒ Credit any overpayments

**FEE CALCULATION**

**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims   Extra Claims   Fee (\$)   Fee Paid (\$)   Multiple Dependent Claims  
 54   - 20 =   34   x   \$50   =   \$1,700.00   \$360.00   \$360.00

Indep. Claims   Extra Claims   Fee (\$)   Fee Paid (\$)  
 4   - 3 =   1   x   \$200   =   \$200.00

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets   Extra Sheets   Number of each additional 50 or fraction thereof   Fee (\$)   Fee Paid (\$)  
 81   - 100 =   0   /50   0   (round up to a whole number) x   \$250.00   =

**4. OTHER FEE(S)**

	Fees Paid (\$)
Other: 1631 Basic National Stage fee	300.00
1632 National Stage search fee	500.00
1633 National Stage examination fee	200.00
Surcharge - Declaration	130.00
1615 National Stage claims - extra total (over twenty)	1,700.00
1614 National Stage claims - extra independent (over three)	200.00
1616 National Stage claims - multiple dependent	360.00

<b>SUBMITTED BY</b>			
Signature		Registration No. (Attorney/Agent)	54,493
Name (Print/Type)	Marla L. Tocker	Telephone	(617) 439-4444
		Date	January 5, 2005

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV437822014US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: January 5, 2005

Signature: Karen Brown (Karen Brown)

TRANSMITTAL LETTER TO THE  
UNITED STATES RECEIVING OFFICE

PTO-1382 (Rev. 4-1995) (Modified)

PCTUS2.FRP /REV03

Date	03 July 2003
International Application	10/520431
Attorney Docket No.	57734-PCT(11259)

## I. Certification under 37 CFR 1.10 (if applicable)

EV342613625US
Express Mail mailing number

03 July 2003
Date of Deposit

I hereby certify that the application/correspondence attached hereto is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Assistant Commissioner for Patents, Washington, D.C. 20231.

<i>Patricia A. Barnes</i>
Signature of person mailing correspondence

Patricia A. Barnes
Typed or printed name of person mailing correspondence

II. ☒ New International Application

TITLE	TARGETING AND TRACKING OF CELLS TO SPECIFIC ORGANS AND TISSUES IN VIVO
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Earliest priority date (Day/Month/Year)
05 July 2002

**SCREENING DISCLOSURE INFORMATION:** In order to assist in screening the accompanying international application for purposes of determining whether a license for foreign transmittal should and could be granted and for other purposes, the following information is supplied. (Note: check as many boxes as apply):

- A. ☐ The invention disclosed was not made in the United States.
- B. ☐ There is no prior U.S. application relating to this invention.
- C. ☒ The following prior U.S. application(s) contain subject matter which is related to the invention disclosed in the attached international application. (NOTE: priority to these applications may or may not be claimed on form PCT/RO/101. (Request) and this listing does not constitute a claim for priority).

application no.	60/393,961	filed on	05 July 2002
application no.		filed on	

- D. ☒ The present international application ☒ is identical ☐ contains less subject matter than that found in the prior U.S. application(s) identified in paragraph C.
- E. ☐ The present international application ☐ contains additional subject matter not found in the prior U.S. application(s) identified in paragraph C. above. The additional subject matter is found on pages  and ☐ DOES NOT ALTER ☐ MIGHT BE CONSIDERED TO ALTER the general nature of the invention in a manner which would require the U.S. application to have been made available for inspection by the appropriate defense agencies under 35 U.S.C. 181 and 37 CFR 5.1. See 37 CFR 5.15

III. ☐ A Response to an Invitation from the RO/US. The following document(s) is (are) enclosed:

- A. ☐ A Request for An Extension of Time to File a Response
- B. ☐ A Power of Attorney (General or Regular)
- C. ☐ Replacement pages:

pages		of the request (PCT/RO/101)	pages		of the figures
pages		of the description	pages		of the abstract
pages		of the claims			

- D. ☐ Submission of Priority Documents

Priority document		Priority document	
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- E. ☒ Fees as specified on attached Fee Calculation sheet form PCT/RO/101 annex

IV. ☐ A Request for Rectification under PCT 91 ☐ A Petition ☐ A Sequence Listing DisketteV. ☐ Other (please specify):The person  
signing this  
form is the:

<input type="checkbox"/> Applicant
<input checked="" type="checkbox"/> Attorney/Agent (Reg. No.) 40,927
<input type="checkbox"/> Common Representative

Robert L. Buchanan

Typed name of signer

Signature